

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match.
The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.
Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

12.16 Shift Change

Text Pages 2 through 4

Hand Processed Changes

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Approved: _____ ***Signature on File*** _____
Collider-Accelerator Department Chairman Date

M. Wiplich

12.16 Shift Change

1. **Purpose**

The purpose of this procedure is to define the sequence of activities required when changing shifts.

2. **Responsibilities**

It is the responsibility of the person or persons executing this procedure to observe all safety rules.

3. **Prerequisites**

The person or persons executing this procedure shall have all formal training required of a TVDG Operator.

4. **Precautions**

None

5. **Procedure**

At shift change, the arriving operators should familiarize themselves with the activities of the previous shifts. They should:

- 5.1 Read the entries in the Operations Log Book for the previous 24 hours or longer if an operator has been absent.
- 5.2 Read the entries in the Shift Log Book for the same period as in step 1 above.
- 5.3 Acquire the status of the Radiation and Access Control (perimeter) system by the following:
 - 5.3.1 Reading the entries in the Radiation Safety Book and Radiation and Access Control Response Book.
 - 5.3.2 Review the possible radiation hazard potential and perimeter and zones selected.
 - 5.3.3 Discuss any radiation safety system problems and the use of any gyp switches.

- 5.3.4 Visually inspect the following for proper lamp indicators, dose rates and/or text messages:
 - 5.3.4.1 The control room master display panel
 - 5.3.4.2 The NRC-ADM 600 remote display units
 - 5.3.4.3 The NRC-ADM 610 area monitors
- 5.4 Acquire any specific information from the operators on duty regarding machine characteristics, including any difficulties encountered in delivering a beam or attaining voltage. Other pertinent information to be acquired is as follows:
 - 5.4.1 If the current run is a TtB run, refer to [TtB Policy](#) for a statement of policy with regard to TtB runs.
 - 5.4.2 Ion species including mass out of source.
 - 5.4.3 Machine energy and target room energy
 - 5.4.4 Single or double stripping.
 - 5.4.5 Charge state(s) of delivered beam and the capability to go higher or lower in energy by going up or down in charge state.
 - 5.4.6 Machine voltage (program and actual).
 - 5.4.7 Flux and/or beam current range required by the user.
 - 5.4.8 Scattering foil thickness (if used).
 - 5.4.9 Beam uniformity and sweeper status (ON/OFF).
 - 5.4.10 Detector used, if any, and bias voltage settings.
 - 5.4.11 Slit settings.
 - 5.4.12 Possible future beams requested by the user including required flux or beam current and approximate time required.

- 5.5 Discuss any problems or unusual occurrences during the previous shift should be discussed. For example:
- 5.5.1 Machine sparks.
 - 5.5.2 Vacuum failures or problems.
 - 5.5.3 Regulation problems in MP-6 or MP-7.
 - 5.5.4 Power failures either general or specific.
 - 5.5.5 User problems or specific requests.
 - 5.5.6 Beam monitoring electronics problems (PMT, energy detector).
 - 5.5.7 Miran (SF6) system failures or unusual alarms or readings.
- 5.6 Upon completion of steps 5.1 through 5.5, the operators coming on duty will initial the shift log book on the Comments line for their shift. This will signify that they are assuming the responsibility for facility operations from the operators going off duty.

6. Documentation

None

7. References

None

8. Attachments

None